

Amendments to the Claims:

1. (Currently Amended) An ~~InfiniBand architecture~~ computer subnet, comprising:
a master subnet manager function;
database elements of the ~~InfiniBand architecture~~ computer subnet, wherein the master subnet manager function updates the database elements;
a replicated set of the database elements; and
a set of standby subnet managers, wherein the replicated set of the database elements is created at each of the set of standby subnet managers, wherein a standby subnet manager included in the set of standby subnet managers assumes the master subnet manager function, and wherein the standby subnet manager included in the set of standby subnet managers that assumes the master subnet manager function initializes the ~~InfiniBand architecture~~ computer subnet using the replicated set of the database elements.

2. (Currently Amended) The ~~InfiniBand architecture~~ computer subnet of claim 1, wherein the standby subnet manager included in the set of standby subnet managers that assumes the master subnet manager function reinitializes the ~~InfiniBand architecture~~ computer subnet.

3. (Currently Amended) The ~~InfiniBand architecture~~ computer subnet of claim 1, wherein the standby subnet manager included in the set of standby subnet managers that assumes the master subnet manager function manages the ~~InfiniBand architecture~~ computer subnet using the replicated set of the database elements.

4. (Currently Amended) The ~~InfiniBand architecture~~ computer subnet of claim 1, wherein the replicated set of the database elements is created at each of the set of standby subnet managers out of band of the InfiniBand architecture subnet.

5. (Currently Amended) The ~~InfiniBand architecture~~ computer subnet of claim 1, wherein the replicated set of the database elements is created at each of the set of standby subnet managers inband on the ~~InfiniBand architecture~~ computer subnet.

6. (Currently Amended) The ~~InfiniBand architecture~~ computer subnet of claim 5, wherein the replicated set of the database elements is created at each of the set of standby subnet managers using reliable multi-packet transaction protocol.

7. (Currently Amended) The ~~InfiniBand architecture~~ computer subnet of claim 5, wherein the replicated set of the database elements is created at each of the set of standby subnet managers using reliable connection transport service.

8. (Currently Amended) The ~~InfiniBand architecture~~ computer subnet of claim 5, wherein the replicated set of the database elements is created at each of the set of standby subnet managers using reliable datagram transport service.

9. (Currently Amended) The ~~InfiniBand architecture~~ computer subnet of claim 1, wherein the replicated set of the database elements comprises an event subscription.

10. (Currently Amended) The ~~InfiniBand architecture~~ computer subnet of claim 1, wherein the replicated set of the database elements comprises a multicast record.

11. (Currently Amended) The ~~InfiniBand architecture~~ computer subnet of claim 1, wherein the replicated set of the database elements comprises a service record.

12. (Currently Amended) The ~~InfiniBand architecture~~ computer subnet of claim 11, wherein the service record comprises a lease time, wherein the master subnet manager function converts the lease time to a first end time, wherein the master subnet manager function converts the first end time to a remaining time, wherein the standby subnet manager included in the set of standby subnet managers converts the remaining time to a second end time, and wherein the second end time is a function of the remaining time and a local time at the standby subnet manager included in the set of standby subnet managers.

13. (Currently Amended) The ~~InfiniBand architecture~~ computer subnet of claim 11, wherein the master subnet manager function periodically decrements a lease time, wherein the

lease time becomes a remaining time, wherein the standby subnet manager included in the set of standby subnet managers converts the remaining time to a second end time, and wherein the second end time is a function of the remaining time and a local time at the standby subnet manager included in the set of standby subnet managers.

14. (Currently Amended) The ~~InfiniBand-architecture~~ computer subnet of claim 1, wherein the replicated set of the database elements comprises an extended node record.

15. (Currently Amended) The ~~InfiniBand-architecture~~ computer subnet of claim 1, wherein the set of standby subnet managers is selected based on a priority value and a globally unique identifier.

16. (Currently Amended) The ~~InfiniBand-architecture~~ computer subnet of claim 1, wherein the replicated set of the database elements are periodically updated.

17. (Currently Amended) An ~~InfiniBand-architecture~~ computer node, comprising:
a master subnet manager function; and
database elements of an ~~InfiniBand-architecture~~ computer subnet, wherein the master subnet manager function updates the database elements, wherein the master subnet manager function initiates creation of a replicated set of database elements at a set of standby subnet managers, wherein a standby subnet manager included in the set of standby subnet managers assumes the master subnet manager function, and wherein the standby subnet manager included in the set of standby subnet managers that assumes the master subnet manager function initializes the ~~InfiniBand-architecture~~ computer subnet using the replicated set of the database elements.

18. (Currently Amended) The ~~InfiniBand-architecture~~ computer node of claim 17, wherein the standby subnet manager included in the set of standby subnet managers that assumes the master subnet manager function reinitializes the ~~InfiniBand-architecture~~ computer subnet.

19. (Currently Amended) The ~~InfiniBand-architecture~~ computer node of claim 17, wherein the standby subnet manager included in the set of standby subnet managers that assumes

the master subnet manager function manages the ~~InfiniBand architecture~~ computer subnet using the replicated set of the database elements.

20. (Currently Amended) The ~~InfiniBand architecture~~ computer node of claim 17, wherein the replicated set of the database elements is created at each of the set of standby subnet managers out of band of the ~~InfiniBand architecture~~ computer subnet.

21. (Currently Amended) The ~~InfiniBand architecture~~ computer subnet of claim 17, wherein the replicated set of the database elements is created at each of the set of standby subnet managers inband on the ~~InfiniBand architecture~~ computer subnet.

22. (Currently Amended) The ~~InfiniBand architecture~~ computer node of claim 21, wherein the replicated set of the database elements is created at each of the set of standby subnet managers using reliable multi-packet transaction protocol.

23. (Currently Amended) The ~~InfiniBand architecture~~ computer node of claim 21, wherein the replicated set of the database elements is created at each of the set of standby subnet managers using reliable connection transport service.

24. (Currently Amended) The ~~InfiniBand architecture~~ computer node of claim 21, wherein the replicated set of the database elements is created at each of the set of standby subnet managers using reliable datagram transport service.

25. (Currently Amended) The ~~InfiniBand architecture~~ computer node of claim 17, wherein the replicated set of the database elements comprises an event subscription.

26. (Currently Amended) The ~~InfiniBand architecture~~ computer node of claim 17, wherein the replicated set of the database elements comprises a multicast record.

27. (Currently Amended) The ~~InfiniBand architecture~~ computer node of claim 17, wherein the replicated set of the database elements comprises a service record.

28. (Currently Amended) The ~~InfiniBand-architecture~~ computer node of claim 27, wherein the service record comprises a lease time, wherein the master subnet manager function converts the lease time to a first end time, wherein the master subnet manager function converts the first end time to a remaining time, wherein the standby subnet manager included in the set of standby subnet managers converts the remaining time to a second end time, and wherein the second end time is a function of the remaining time and a local time at the standby subnet manager included in the set of standby subnet managers.

29. (Currently Amended) The ~~InfiniBand-architecture~~ computer node of claim 27, wherein the master subnet manager function periodically decrements a lease time, wherein the lease time becomes a remaining time, wherein the standby subnet manager included in the set of standby subnet managers converts the remaining time to a second end time, and wherein the second end time is a function of the remaining time and a local time at the standby subnet manager included in the set of standby subnet managers.

30. (Currently Amended) The ~~InfiniBand-architecture~~ computer node of claim 17, wherein the replicated set of the database elements comprises an extended node record.

31. (Currently Amended) An ~~InfiniBand-architecture~~ computer node comprising a computer-readable medium containing computer instructions for instructing a processor to perform a method of replicating database elements in an ~~InfiniBand-architecture~~ computer subnet, the instructions comprising:

- a master subnet manager function updating database elements of the ~~InfiniBand-architecture~~ computer subnet;

- creating a replicated set of the database elements at each of a set of standby subnet managers;

- a standby subnet manager included in the set of standby subnet managers assuming the master subnet manager function; and

the standby subnet manager included in the set of standby subnet managers that assumes the master subnet manager function initializing the ~~InfiniBand-architecture~~ computer subnet using the replicated set of the database elements.

32. (Currently Amended) The ~~InfiniBand-architecture~~ computer node of claim 31, wherein initializing comprises reinitializing the ~~InfiniBand-architecture~~ computer subnet.

33. (Currently Amended) The ~~InfiniBand-architecture~~ computer node of claim 31, further comprising the standby subnet manager included in the set of standby subnet managers that assumes the master subnet manager function managing the ~~InfiniBand-architecture~~ computer subnet using the replicated set of the database elements.

34. (Currently Amended) The ~~InfiniBand-architecture~~ computer node of claim 31, wherein creating comprises creating a replicated set of the database elements at each of a set of standby subnet managers out of band of the ~~InfiniBand-architecture~~ computer subnet.

35. (Currently Amended) The ~~InfiniBand-architecture~~ computer node of claim 31, wherein creating comprises creating a replicated set of the database elements at each of a set of standby subnet managers inband on the ~~InfiniBand-architecture~~ computer subnet.

36. (Currently Amended) The ~~InfiniBand-architecture~~ computer node of claim 35, wherein creating inband on the ~~InfiniBand-architecture~~ computer subnet comprises creating using reliable multi-packet transaction protocol.

37. (Currently Amended) The ~~InfiniBand-architecture~~ computer node of claim 35, wherein creating inband on the ~~InfiniBand-architecture~~ computer subnet comprises creating using reliable connection transport service.

38. (Currently Amended) The ~~InfiniBand-architecture~~ computer node of claim 35, wherein creating inband on the ~~InfiniBand-architecture~~ computer subnet comprises creating using reliable datagram transport service.

39. (Currently Amended) The ~~InfiniBand architecture~~ computer node of claim 31, wherein the replicated set of the database elements comprises an event subscription.

40. (Currently Amended) The ~~InfiniBand architecture~~ computer node of claim 31, wherein the replicated set of the database elements comprises a multicast record.

41. (Currently Amended) The ~~InfiniBand architecture~~ computer node of claim 31, wherein the replicated set of the database elements comprises a service record.

42. (Currently Amended) The ~~InfiniBand architecture~~ computer node of claim 41, further comprising:

- the service record comprising a lease time;
- the master subnet manager function converting the lease time to a first end time;
- the master subnet manager function converting the first end time to a remaining time; and
- the standby subnet manager included in the set of standby subnet managers converting the remaining time to a second end time, wherein the second end time is a function of the remaining time and a local time at the standby subnet manager included in the set of standby subnet managers.

43. (Currently Amended) The ~~InfiniBand architecture~~ computer node of claim 41 further comprising:

- the master subnet manager function periodically decrementing a lease time;
- the lease time becoming a remaining time; and
- the standby subnet manager included in the set of standby subnet managers converting the remaining time to a second end time, and wherein the second end time is a function of the remaining time and a local time at the standby subnet manager included in the set of standby subnet managers.

44. (Currently Amended) The ~~InfiniBand architecture~~ computer node of claim 31, wherein the replicated set of the database elements comprises an extended node record.

45. (Currently Amended) The ~~InfiniBand architecture~~ computer node of claim 31, further comprising selecting the set of standby subnet managers based on a priority value and a globally unique identifier.

46. (Currently Amended) The ~~InfiniBand architecture~~ computer node of claim 31, wherein creating the replicated set of the database elements comprises periodically updating the replicated set of the database elements.